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[54] **HAND-HELD LASER LIGHT GENERATOR DEVICE**

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[57] ABSTRACT

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[58] **Field of Search** 606/2, 3, 9, 10,
606/13, 17; 607/1, 88-94; 219/219, 220,
222

[56] **References Cited**

U.S. PATENT DOCUMENTS

4,608,978	9/1985	Rohr	607/93
4,733,660	3/1988	Itzkan	606/17
4,784,135	11/1988	Blum et al.	606/3
4,905,690	3/1990	Ohshiro et al.	607/89
5,474,528	12/1995	Meserol	607/90
5,755,752	5/1998	Segal	606/3

[57] ABSTRACT

A hand-held laser light generator device includes a wand, a semiconductor diode laser for generating a beam of laser light, an optical arrangement, a housing having an interior chamber, a battery in the housing interior chamber, an electrical cord connecting the laser in the wand with the battery in the housing, an electronic timing circuit, a start switch and a selector knob. The wand, capable of being retained in a user's hand, is an elongated hollow tube and defines an interior cavity. The laser is mounted in the wand interior cavity and therewith is freely movable so as to enable the user to direct the beam of laser light onto a desired location. The optical arrangement mounted in the wand interior cavity receives and transforms the generated beam of laser light into a line of laser light. The electrical timing circuit is disposed in the housing interior chamber and mounted to the housing. The start switch is activatable between on and off positions while the selector knob has multiple period of time length setting positions. The start switch and selector knob are mounted to the housing and accessible at the exterior thereof and are in operable communication with the electrical timing circuit for controlling initiation of generation of and length of the period of time that the laser light beam is generated.

19 Claims, 4 Drawing Sheets

